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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,403	04/21/2003	David Kirk Rodham	109846-278	1788

7590

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Hale & Dorr  
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The Willard Office Building  
1455 Pennsylvania Avenue  
Washington, DC 20004-1008

EXAMINER
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WORLEY, CATHY KINGDON

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/890,403	<b>Applicant(s)</b> RODHAM ET AL.	
	<b>Examiner</b> Cathy K. Worley	<b>Art Unit</b> 1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-43 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 2, drawn to the use of a formulation comprising a volatile chemical inducer, and a polyethoxylated alcohol or a trisiloxane polyethoxylate for controlling gene expression in a plant.

Group II, claim(s) 3-4, drawn to the use of a formulation comprising a C<sub>1</sub>-C<sub>6</sub> alcohol or a C<sub>2</sub>-C<sub>9</sub> ketone, and a polyethoxylated alcohol or a trisiloxane polyethoxylate for controlling gene expression.

Group III, claim(s) 5-8, drawn to the use of a formulation comprising a volatile chemical inducer, and a polyethoxylated oleyl, lauryl, stearyl or cetyl alcohol for controlling gene expression.

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Group IV, claim(s) 9, drawn to the use of a formulation comprising a volatile chemical inducer, and a polyethoxylated alcohol or a trisiloxane polyethoxylate for controlling gene expression, wherein the polyethoxylated alcohol or trisiloxane polyethoxylate is at a concentration of about 0.5% wt/wt or less.

Group V, claim(s) 10-14, drawn to the use of a formulation comprising a volatile chemical inducer, and a hydrogen or methyl end-capped trisiloxane polyethoxylate for controlling gene expression.

Group VI, claim(s) 15, drawn to the use of a formulation comprising a volatile chemical inducer, and a polyethoxylated alcohol or a trisiloxane polyethoxylate for controlling gene expression, wherein the volatile chemical inducer is at a concentration between about 2% and 5% wt/wt.

#### CLAIM 1 LINKS GROUPS I-VI

Group VII, claim(s) 16-17 and 19, drawn to a method of controlling expression of a target gene comprising transforming an organism with a chemically-inducible plant gene expression cassette.

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Group VIII, claim(s) 18-19, drawn to a method of controlling expression of a target gene comprising transforming a plant with a chemically-inducible plant gene expression cassette.

Group IX, claim(s) 21-24, drawn to a formulation consisting essentially of a volatile chemical inducer, a hydrogen or a methyl end-capped trisiloxane polyethoxylate, and a diluent.

Group X, claim(s) 25, drawn to a formulation consisting essentially of a volatile chemical inducer at a concentration between about 2% and 5% wt/wt, and a hydrogen or a methyl end-capped trisiloxane polyethoxylate, and a diluent.

#### CLAIM 20 LINKS GROUPS IX - X

Group XI, claim(s) 27-32, drawn to a formulation comprising a C<sub>1</sub>-C<sub>6</sub> alcohol inducer in an amount of less than 5% wt/wt, a polyethoxylated oleyl, lauryl, stearyl, or cetyl alcohol, and water.

Group XII, claim(s) 33, drawn to a formulation comprising a C<sub>1</sub>-C<sub>6</sub> alcohol inducer in an amount between about 2% to less than 5% wt/wt, a polyethoxylated C<sub>10</sub>-C<sub>20</sub> alcohol, and water.

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Group XIII, claim(s) 34, drawn to a formulation comprising a C<sub>1</sub>-C<sub>6</sub> alcohol inducer in an amount of less than 5% wt/wt, a polyethoxylated C<sub>10</sub>-C<sub>20</sub> alcohol at a concentration of about 0.5% wt/wt or less, and water.

Group XIV, claim(s) 35, drawn to a formulation comprising ethanol or propan-2-ol in an amount of less than 5% wt/wt, a polyethoxylated C<sub>10</sub>-C<sub>20</sub> alcohol, and water.

#### CLAIM 26 LINKS GROUPS XI-XIV

Group XV, claim(s) 37, drawn to a formulation comprising a C<sub>3</sub>-C<sub>9</sub> ketone at a concentration between about 2% and 5% wt/wt, a polyethoxylated C<sub>10</sub>-C<sub>20</sub> alcohol, and a diluent.

Group XVI, claim(s) 38-43, drawn to a formulation comprising a C<sub>3</sub>-C<sub>9</sub> ketone, a polyethoxylated oleyl, lauryl, stearyl, or cetyl alcohol, and a diluent.

#### CLAIM 36 LINKS GROUPS XV-XVI

The inventions listed as Groups I-XVI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The technical feature linking groups I-XVI is a formulation comprising a volatile chemical inducer, a polyethoxylated C<sub>10</sub>-C<sub>20</sub> alcohol or a trisiloxane polyethoxylate, and a diluent. However, Garti et al. teach a formulation comprising ethanol (a volatile chemical inducer), Brij 76 (a polyethoxylated C<sub>18</sub> alcohol), and water (see Garti et al. (1995) Journal of Colloid and Interface Science, Vol. 169, pp. 428-436, page 432, Table 3, in particular). The teaching of Garti et al. anticipates the formulation that links the inventions of groups I-XVI. Furthermore, Caddick et al. (WO 93/21334 (1993)) teach the method of inducing gene expression in transgenic plants utilizing a formulation comprising cyclohexanone (a volatile chemical inducer), Tween 85 (a polyethoxylated C<sub>6</sub> alcohol), and water. This teaching of Caddick et al. shows that the instant application lacks an inventive step, because it would have been obvious to one of ordinary skill in the art to substitute Brij 76 for Tween 85. Therefore, the technical feature linking the inventions of groups I-XVI does not constitute a special technical feature as defined by PCT Rule 13.2 as it does not define a contribution over the prior art.

Accordingly, Groups I-V are not so linked by the same or a corresponding special technical feature as to form a single general inventive concept.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cathy K. Worley whose telephone number is (571) 272-8784. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571) 272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Feb. 2, 2006

*Cynthia Collins* 2/6/06  
CYNTHIA COLLINS  
PRIMARY EXAMINER  
ART UNIT 1638